WHAT IS CLAIMED IS:

1. A schottky device comprising;

a semiconductive substrate of a first conductivity type and a first concentration of dopants;

a semiconductive layer of said first conductivity type and a second concentration of dopants, said first concentration of dopants being higher than said second concentration of dopants;

a plurality of trenches extending to a depth inside said semiconductive layer, each of said trenches including opposing sidewalls and a bottom, and each being adjacent at least one mesa;

a first insulation layer of a first thickness on each sidewall of each of said trenches;

a second insulation layer of a second thickness on said bottom of each of said trenches, said second thickness being greater than said first thickness;

a schottky barrier in schottky contact with said mesas;

a first electrical contact in contact with said schottky barrier; and

a second electrical contact in electrical contact with said semiconductive substrate.

2. A schottky device according to claim 1, wherein said first insulation layer is grown on each sidewall of each of said trenches, and said second insulation is grown on said bottom of each of said trenches.

3. A schottky device according to claim 1, further comprising an electrode disposed in each of said trenches, said first contact being electrically connected to each of said electrodes.

4. A schottky device according to claim 3, wherein said electrode is comprised of conductive polysilicon.

5. A schottky device according to claim 1, wherein said semiconductive layer and said semiconductive substrate are comprised of silicon.

6. A schottky device according to claim 1, wherein said semiconductive layer is an epitaxial layer.

7. A schottky device according to claim 1, further comprising a termination trench surrounding said plurality of said trenches, said termination trench including a bottom portion, an inner sidewall and an outer sidewall, said inner sidewall being closer to said plurality of trenches than said outer sidewall.

8. A schottky device according to claim 7, further comprising an insulation layer disposed on at least said inner sidewall of said termination trench, and an insulation layer disposed on said bottom portion of said termination trench, said insulation layer on said bottom portion being thicker than said insulation layer on said inner sidewall of said trench.

9. A schottky device according to claim 1, wherein said first insulation layer is between 500-750 Å.

10. A schottky device according to claim 1, wherein said second insulation layer is between 1000-5000 Å.

11. A schottky device according to claim 1, wherein said schottky barrier is comprised of one of platinum, platinum silicide and platinum tungsten.

12. A schottky device according to claim 1, wherein said first insulation layer is oxide that is grown on said sidewalls of each of said trenches, and said second insulation is oxide that is deposited at the bottom of each of said trenches.

13. A method for manufacturing a schottky device comprising:

providing a semiconductive body;

forming a plurality of trenches in said semiconductive body, each trench having opposing sidewalls, and a bottom, and each being adjacent a mesa;

covering said sidewalls of said trenches with an oxidation preventing layer;

forming an oxide layer at the bottom of each of said trenches; and

forming a schottky barrier layer in schottky contact with each of said mesas.

14. A method according to claim 13, further comprising forming an oxide layer on said sidewalls of said trenches prior to forming said oxidation preventing layer.

15. A method according to claim 14, wherein said oxide layer at said sidewalls of said trenches is thinner than said oxide layer at said bottom of said trenches.

16. A method according to claim 13, further comprising forming an oxidation preventing layer on a major surface of said semiconductive layer, forming

a plurality of openings in said oxidation preventing layer and forming said plurality of trenches by etching said semiconductive layer at bottoms of said openings.

17. A method according claim 16, wherein said oxidation preventing layer is comprised of a nitride.

18. A method according to claim 16, further comprising growing a layer of oxide on said sidewalls of said trenches prior to forming said oxidation preventing layer on said sidewalls of said trenches.

19. A method according to claim 13, further comprising forming a termination trench around said plurality of trenches.

20. A method according to claim 16, further comprising forming an opening in said oxidation preventing layer surrounding said plurality of openings and etching said semiconductive layer at the bottom of said opening surrounding said plurality of openings to form a termination trench.

21. A method according to claim 13, wherein said oxidation preventing layer is comprised of nitride.

22. A method according to claim 13, further comprising forming a layer of oxidation preventing layer over said sidewalls and said bottoms of said trenches and etching said oxidation preventing layer from said bottoms of said trenches to achieve covering said sidewalls of said trenches with an oxidation preventing layer.

23. A method according to claim 22, wherein said oxidation preventing layer is comprised of a nitride.